

LISTING OF THE CLAIMS

1.-4. Canceled

5. (Currently Amended) ~~The catalyst structure for purifying an exhaust gas according to claim 1 wherein~~ A catalyst structure for purifying an exhaust gas comprising a stack of two or more catalyst elements and a frame to house the stack,
each of the catalyst elements being formed by bending a rectangular or square plate supporting a catalyst component on its surface into a shape of stairs in the direction parallel to that of a pair of sides of the plate at a predetermined interval so that flat plate portions and level-changing portions are alternately formed in the element,
the catalyst elements being stacked such that the position of the level-changing portions are shifted by a predetermined length between adjoining catalyst elements,
the catalyst elements forming gas flow passages having a rectangular or rhombic cross section between the adjoining catalyst element, and
the length of each of the catalyst elements is an integral multiple of the sum of the height of the level-changing portions and the length of the flat plate portions.

6.-7. Canceled

8. (Original) A process for producing a catalyst structure for purifying an exhaust gas comprising forming a predetermined length of flat plate portions and a predetermined height of level-changing portions alternately in a belt-shaped substrate for catalyst element so that a stairs-like substrate is prepared, cutting in turn the flat plate portions of the stairs-like substrate thus obtained in the direction parallel to that of the edges formed by the level-changing portions and the flat plate portions such that the following relation is established between the whole length W of each of the cut catalyst elements and the distance L between adjacent level-changing portions in each of the elements:

$$W = n \times L + L - d$$

wherein n represents the number of the level-changing portions per one sheet of the element, and d represents a constant which is smaller than L but Larger than 0, to form two or more catalyst elements, and then stacking the catalyst elements.

9. (Original) The process for producing a catalyst structure for purifying an exhaust gas according to claim 8 wherein a catalyst component having a catalytic activity is supported on the belt-shaped substrate for an catalyst element before or after the belt-shaped substrate is cut into catalyst elements having a predetermined whole length of W.

10. (Original) A process for producing a catalyst structure for purifying an exhaust gas comprising cutting in advance a belt-shaped substrate for catalyst element to such a predetermined length that the following relation is established between the whole length W of each of the catalyst elements and the distance L between adjacent level-changing portions in each of the elements to be formed:

$$W = n \times L + L - d$$

wherein n represents the number of the level-changing portions per one sheet of the element, and d represents a constant which is smaller than L but larger than 0, to obtain two or more unit catalyst elements, forming a predetermined length of flat plate portions and a predetermined height of level-changing portions alternately in each of the catalyst elements so that the position of the flat plate portions and the level-changing portions to be formed are each shifted by a length of d between adjoining catalyst elements, and then stacking the catalyst elements.

11. (Original) The process for producing a catalyst structure for purifying an exhaust gas according to claim 10 wherein a catalyst component is supported on the belt-shaped substrate for catalyst element before or after the substrate is cut into catalyst elements having a predetermined whole length of W.

12.-23. (Canceled)